

REMARKS

Claims 1-94 are pending in the application.

Claims 1-14, 16-26, 30-45, 47-59, 61-77, 79-89 and 93-94 have been rejected.

Claims 14-15, 20-22, 45-46, 51-53, 77-78 and 83-85 have been canceled, without prejudice.

Claims 1, 23, 32, 54, 64 and 86 have been amended, as set forth herein.

New Claims 95-106 have been added.

I. DRAWING OBJECTIONS

The drawings were objected to as not showing the “third physical interface” as recited in Claims 17-19, 48-50 and 80-82. The objection is respectfully traversed.

Applicants’ FIGURE 8 shows a third physical interface (interfaces 92a, 92b, and 92c).

Accordingly, the Applicants respectfully request withdrawal of the objection to the drawings.

II. REJECTION UNDER 35 U.S.C. § 102 (Mahalingam, et al.)

Claims 1-8, 10, 11, 14, 16, 17-19, 32-39, 41, 42, 45, 47-50, 64-71, 73, 74, 77 and 79-82 were rejected under 35 U.S.C. § 102(e) as being anticipated by Mahalingam, et al. (US Patent No. 6,208,616. The rejection is respectfully traversed.

Applicants have amended independent Claims 1, 23, 32, 54, 64 and 86 to recite the assumption of routing and/or bridging functions (similar to allowed Claims 15, 46 and 78). Claims 14, 45, and 77 have been canceled, without prejudice.

Accordingly, the Applicants respectfully request the Examiner withdraw the § 102(e) rejection of Claims 1-8, 10, 11, 16, 17-19, 32-39, 41, 42, 47-50, 64-71, 73, 74 and 79-82.

III. REJECTION UNDER 35 U.S.C. § 102 (Heeren, et al.)

Claims 20-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by Heeren, et al. (US Patent No. 6,311,288). The rejection is respectfully traversed.

Applicants have canceled Claims 20-22, without prejudice.

IV. REJECTIONS UNDER 35 U.S.C. § 103 (to Mahalingan, et al., and to Sakamoto, et al.)

Claims 9, 40 and 72 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahalingan, et al. (US Patent No. 6,208,616). Claims 12, 13, 23-26, 30, 31, 43, 44, 54-57, 61-63, 72, 75-76, 78, 86-89, 93 and 94 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakimoto, et al. (US Patent No. 5,902,544). The rejections are respectfully traversed.

All these rejected claims depend from independent Claims 1, 23, 32, 54, 64 or 86 (as amended). Therefore, for the same reasons set forth above, these claims are allowable.

Accordingly, the Applicants respectfully request withdrawal of the § 103(a) rejections of Claims 9, 12, 13, 23-26, 30, 31, 40, 43, 44, 54-57, 61-63, 72, 75-76, 78, 86-89, 93 and 94.

V. REJECTION UNDER 35 U.S.C. § 103 (to Heeren, et al.)

Claims 51-53 and 83-85 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Heeren, et al. (US Patent No. 6,311,288). The rejection is respectfully traversed.

Applicants have canceled Claims 51-53 and 83-85, without prejudice.

VI. NEW CLAIMS

Applicants wish to thank the Examiner for the indication of allowability for Claims 15, 27-29, 46, 58-60, 78 and 90-92 if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 27-29, 58-60 and 90-92 have been rewritten as newly added Claims 95-103. Accordingly, new Claims 95-103 correspond to allowed original Claims 27-29, 58-60 and 90-92. Claims 15, 46 and 78 have been cancelled, without prejudice, due to the amendments made to the independent Claims 1, 32 and 64.

Applicants have also added new independent Claims 104-106, and believe these claims are patentable over the art of record.

VII. CONCLUSION

As a result of the foregoing, the Applicants assert that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

AMENDMENTS WITH MARKINGS TO SHOW CHANGES MADE

Claims 1, 23, 32, 54, 64 and 86 were amended herein, and new Claims 95-106 were added herein, as follows:

1 1. (Amended) A method of switching between physical interfaces on a device, the method
2 comprising:

3 switching from a first physical interface on the device to a second physical interface on the
4 device based on information in an interface redundancy group such that the second physical interface
5 assumes responsibilities of the first physical interface, the responsibilities comprising routing and/or
6 bridging functions;

7 wherein the information in the interface redundancy group identifies the first physical
8 interface as a primary interface for the device and the second physical interface as a secondary
9 interface for the device.

1 23. (Amended) A method of switching between asynchronous transfer mode (ATM)
2 physical interfaces on a device, the method comprising:

3 switching from a first ATM physical interface on the device to a second ATM physical
4 interface on the device based on information in an interface redundancy group such that the second
5 ATM physical interface assumes responsibilities of the first ATM physical interface, the
6 responsibilities comprising routing and/or bridging functions; and

7 establishing ATM network layer interfaces over the second ATM physical interface that
8 correspond to ATM network layer interfaces that were established over the first ATM physical
9 interface prior to switching;

10 wherein the information in the interface redundancy group identifies the first ATM physical
11 interface as a primary interface for the device and the second ATM physical interface as a secondary
12 interface for the device.

1 32. (Amended) A computer program stored on a computer-readable medium for switching
2 between physical interfaces on a device, the computer program comprising instructions that cause
3 a computer to:

4 switch from a first physical interface on the device to a second physical interface on the
5 device based on information in an interface redundancy group such that the second physical interface
6 assumes responsibilities of the first physical interface, the responsibilities comprising routing and/or
7 bridging functions;

8 wherein the information in the interface redundancy group identifies the first physical
9 interface as a primary interface for the device and the second physical interface as a secondary
10 interface for the device.

1 54. (Amended) A computer program stored on a computer-readable medium for switching
2 between asynchronous transfer mode (ATM) physical interfaces on a device, the computer program
3 comprising instructions that cause a computer to:

4 switch from a first ATM physical interface on the device to a second ATM physical interface
5 on the device based on information in an interface redundancy group such that the second ATM
6 physical interface assumes responsibilities of the first ATM physical interface, the responsibilities
7 comprising routing and/or bridging functions; and

8 establish ATM network layer interfaces over the second ATM physical interface that
9 correspond to ATM network layer interfaces that were established over the first ATM physical
10 interface prior to switching;

11 wherein the information in the interface redundancy group identifies the first ATM physical
12 interface as a primary interface for the device and the second ATM physical interface as a secondary
13 interface for the device.

1 64. (Amended) An apparatus which switches between physical interfaces, the apparatus
2 comprising:

3 a first physical interface;

4 a second physical interface; and

5 a processor which executes instructions to switch from the first physical interface to the
6 second physical interface based on information in an interface redundancy group such that the second
7 physical interface assumes responsibilities of the first physical interface, the responsibilities
8 comprising routing and/or bridging functions;

9 wherein the information in the interface redundancy group identifies the first physical
10 interface as a primary interface for the device and the second physical interface as a secondary
11 interface for the device.

1 86. (Amended) An apparatus which switches between asynchronous transfer mode (ATM)
2 physical interfaces, the apparatus comprising:
3 a first ATM physical interface;
4 a second ATM physical interface; and
5 a processor which executes instructions to:
6 switch from the first ATM physical interface to the second ATM physical interface
7 based on information in an interface redundancy group such that the second ATM physical interface
8 assumes responsibilities of the first ATM physical interface, the responsibilities comprising routing
9 and/or bridging functions; and
10 establish ATM network layer interfaces over the second ATM physical interface that
11 correspond to ATM network layer interfaces that were established over the first ATM physical
12 interface prior to switching;
13 wherein the information in the interface redundancy group identifies the first ATM physical
14 interface as a primary interface for the device and the second ATM physical interface as a secondary
15 interface for the device.

Please add new Claims 95-106:

1 95. (New) A method of switching between asynchronous transfer mode (ATM) physical
2 interfaces on a device, the method comprising:
3 switching from a first ATM physical interface on the device to a second ATM physical
4 interface on the device based on information in an interface redundancy group, the first ATM
5 physical interface associated with a driver and a signaling stack;
6 establishing ATM network layer interfaces over the second ATM physical interface that
7 correspond to ATM network layer interfaces that were established over the first ATM physical
8 interface prior to switching, and wherein the information in the interface redundancy group identifies
9 the first ATM physical interface as a primary interface for the device and the second ATM physical
10 interface as a secondary interface for the device; and
11 detecting an event at the first ATM physical interface wherein the switching is performed in
12 response to the event, and the event comprises a failure of the first ATM physical interface, and the
13 failure of the first ATM physical interface comprises a failure of the driver and/or signaling stack.

1 96. (New) The method of claim 95, further comprising monitoring the driver and the
2 signaling stack in order to detect a failure of the driver and/or the signaling stack.

1 97. (New) A method of switching between asynchronous transfer mode (ATM) physical
2 interfaces on a device, the method comprising:
3 switching from a first ATM physical interface on the device to a second ATM physical
4 interface on the device based on information in an interface redundancy group;
5 establishing ATM network layer interfaces over the second ATM physical interface that
6 correspond to ATM network layer interfaces that were established over the first ATM physical
7 interface prior to switching, and wherein the information in the interface redundancy group identifies
8 the first ATM physical interface as a primary interface for the device and the second ATM physical
9 interface as a secondary interface for the device; and
10 detecting an event at the first ATM physical interface and wherein the switching is performed
11 in response to the event, and the event comprises receipt of a slot failure at the first ATM physical
12 interface.

1 98. (New) A computer program stored on a computer-readable medium for switching
2 between asynchronous transfer mode (ATM) physical interfaces on a device, the computer program
3 comprising instructions that cause a computer to:

4 switch from a first ATM physical interface on the device to a second ATM physical interface
5 on the device based on information in an interface redundancy group, the first ATM physical
6 interface associated with a driver and a signaling stack;

7 establish ATM network layer interfaces over the second ATM physical interface that
8 correspond to ATM network layer interfaces that were established over the first ATM physical
9 interface prior to switching, and wherein the information in the interface redundancy group identifies
10 the first ATM physical interface as a primary interface for the device and the second ATM physical
11 interface as a secondary interface for the device; and

12 detect an event at the first ATM physical interface and wherein the switching is performed
13 in response to the event, and the event comprises a failure of the first ATM physical interface, and
14 the failure of the first ATM physical interface comprises a failure of the driver and/or the signaling
15 stack.

1 99. (New) The computer program of claim 98, further comprising instructions that cause
2 the computer to monitor the driver and the signaling stack in order to detect a failure of the driver
3 and/or the signaling stack.

1 100. (New) A computer program stored on a computer-readable medium for switching
2 between asynchronous transfer mode (ATM) physical interfaces on a device, the computer program
3 comprising instructions that cause a computer to:
4 switch from a first ATM physical interface on the device to a second ATM physical interface
5 on the device based on information in an interface redundancy group;
6 establish ATM network layer interfaces over the second ATM physical interface that
7 correspond to ATM network layer interfaces that were established over the first ATM physical
8 interface prior to switching, and wherein the information in the interface redundancy group identifies
9 the first ATM physical interface as a primary interface for the device and the second ATM physical
10 interface as a secondary interface for the device; and
11 detect an event at the first ATM physical interface and wherein the switching is performed
12 in response to the event, and the event comprises receipt of a slot failure at the first ATM physical
13 interface.

1 101. (New) An apparatus which switches between asynchronous transfer mode (ATM)
2 physical interfaces, the apparatus comprising:
3 a first ATM physical interface;
4 a second ATM physical interface; and
5 a processor which executes instructions to:
6 switch from the first ATM physical interface to the second ATM physical interface
7 based on information in an interface redundancy group, the first ATM physical interface associated
8 with a driver and a signaling stack;;
9 establish ATM network layer interfaces over the second ATM physical interface that
10 correspond to ATM network layer interfaces that were established over the first ATM physical
11 interface prior to switching, and wherein the information in the interface redundancy group identifies
12 the first ATM physical interface as a primary interface for the device and the second ATM physical
13 interface as a secondary interface for the device; and
14 detect an event at the first ATM physical interface and wherein the switching is
15 performed in response to the event, and the event comprises a failure of the first ATM physical
16 interface, and the failure of the first ATM physical interface comprises a failure of the driver and/or
17 the signaling stack.

1 102. (New) The apparatus of claim 101, wherein the processor executes instructions to
2 monitor the driver and the signaling stack in order to detect a failure of the driver and/or the
3 signaling stack.

1 103. (New) An apparatus which switches between asynchronous transfer mode (ATM)
2 physical interfaces, the apparatus comprising:
3 a first ATM physical interface;
4 a second ATM physical interface; and
5 a processor which executes instructions to:
6 switch from the first ATM physical interface to the second ATM physical interface
7 based on information in an interface redundancy group;
8 establish ATM network layer interfaces over the second ATM physical interface that
9 correspond to ATM network layer interfaces that were established over the first ATM physical
10 interface prior to switching, and wherein the information in the interface redundancy group identifies
11 the first ATM physical interface as a primary interface for the device and the second ATM physical
12 interface as a secondary interface for the device; and
13 detect an event at the first ATM physical interface and wherein the switching is
14 performed in response to the event, and the event comprises receipt of a slot failure at the first ATM
15 physical interface.

1 104. (New) A method of switching between physical interfaces on a device, the method
2 comprising:
3 switching from a first physical interface on the device to a second physical interface on the
4 device based on information in an interface redundancy group, the first physical interface supporting
5 one or more network layer interfaces comprising a virtual circuit established in accordance with a
6 protocol;
7 wherein the information in the interface redundancy group identifies the first physical
8 interface as a primary interface for the device and the second physical interface as a secondary
9 interface for the device.

1 105. (New) A computer program stored on a computer-readable medium for switching
2 between physical interfaces on a device, the computer program comprising instructions that cause
3 a computer to:

4 switch from a first physical interface on the device to a second physical interface on the
5 device based on information in an interface redundancy group, the first physical interface supporting
6 one or more network layer interfaces comprising a virtual circuit established in accordance with a
7 protocol;

8 wherein the information in the interface redundancy group identifies the first physical
9 interface as a primary interface for the device and the second physical interface as a secondary
10 interface for the device.

1 106. (New) An apparatus which switches between physical interfaces, the apparatus
2 comprising:
3 a first physical interface;
4 a second physical interface; and
5 a processor which executes instructions to switch from the first physical interface to the
6 second physical interface based on information in an interface redundancy group, the first physical
7 interface supporting one or more network layer interfaces comprising a virtual circuit established in
8 accordance with a protocol;
9 wherein the information in the interface redundancy group identifies the first physical
10 interface as a primary interface for the device and the second physical interface as a secondary
11 interface for the device.

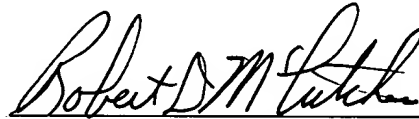
If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *rmccutcheon@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: 1/23/2002



Robert D. McCutcheon
Registration No. 38,717

P.O. Drawer 800889
Dallas, Texas 75380
(972) 628-3632 (direct dial)
(972) 628-3600 (main number)
(972) 628-3616 (fax)
E-mail: *rmccutcheon@davismunck.com*